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# **Digital Lab 3D Printing**

## **STEP ONE: SET UP**

- 1. Make sure the extruders and bed are clean before calibration. Have whoever is working in The Hub, and knows how to 3D print, clean the extruders for you. Find 'Preheat' in the LCD Menu. Use wire brush to gently scrub the extruder heads of excess plastic filament. Wipe any debris from bed.
- **2.** To Level the printing bed go to PRINT FROM SD>PLATE\_LEVELING. Follow the prompts on the LCD display. You will level the 3 axis points using a piece of paper. You want to lower or raise the bed just enough that the piece of paper slides under the extruder heads but doesn't get stuck. Repeat this process for the next 3 axis points. Have whoever is working in The Hub assist with this step if you are unsure.

### STEP TWO: PRINTING

- **1.** Download a 3d Object from www.thingiverse.com OR upload one, if you already have it picked out, and save it to the desktop. The image must be an .STL or .G file in order to print.
- **2.** Open the 3D printing software and IMPORT the STL or G file. You can resize, rotate and move the image around.
- **3.** You must use glue stick to coat the bed where your 3d object will print to help increase the chance of a successful print.
- **4.** Click 'Generate the Gcode' in the 3d printer software to begin slicing the 3d object. After the slicing has finished press 'Print' to send the file to the Flash Forge Creator Pro.
- **5.** Let the printer cool down before removing your object.

#### STEP THREE: CLEAN UP

- **1.** Once the printer has cooled down and the object has been removed, place a damp paper towel on the bed for about 5-10 minutes, and wipe the glue off. Wipe once more with a dry paper towel.
- 2. Clean the extruders for the next person after your print has finished. Do so while the extruders are still warm. Use the wire toothbrush to clean the extruders, like in the beginning
- **3.** Log out of the computer and turn off printer when you are finished.